

STATEMENT OF BASIS

as required by LAC 33:IX.3109 for a draft permit for which a fact sheet under LAC 33:IX.3111 is not prepared, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0123269; AI 153322; PER20070001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. THE APPLICANT IS: Southeastern Louisiana Water & Sewer Company, LLC (SELA)
Goodbee Regional Sewage Treatment Plant
350 North Causeway Boulevard
Mandeville, Louisiana 70448

II. PREPARED BY: Todd Franklin

DATE PREPARED: August 8, 2008

III. PERMIT ACTION: issue LPDES permit LA0123269, AI 153322; PER20070001

LPDES application received: September 12, 2007

Revised application received: July 7, 2008

A draft permit for this facility was public noticed on December 19, 2007. A public hearing was then held on March 13, 2008. Due to the high level of concern for this facility, SELA has been communicating with the LDEQ and the Department of Wildlife and Fisheries to explore alternatives to satisfy the concerns of the public. One of the major concerns of the public was the proposed discharge would flow into Soap and Tallow Branch, which is listed as an Outstanding Natural Resource Water. SELA has made the decision to move the discharge point so that the proposed discharge would flow into the Bedico Creek / Tangipahoa River watershed, which is not listed as an Outstanding Natural Resource Water. A revised application was submitted to illustrate the proposed changes to the original application. A new draft permit will be public noticed due to the submittal of the revised permit application.

IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a proposed privately owned treatment facility serving the following subdivisions: Countryside, Eagle Landing, Tantella Ranch, and Bedico Ranch
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located on LA Highway 1077 at the Tantella Ranch Subdivision northwest of Covington, St. Tammany Parish.
- D. The treatment facility consists of an extended aeration sewage treatment plant with an activated sludge return process. Disinfection is by liquid hypochlorite solution.

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E. Outfall 001

Discharge Location: Latitude 30° 30' 12" North
Longitude 90° 12' 6" West

Description: treated sanitary wastewater

Average Expected Flow: **Phase I:** 171 residences @ 400 GPD each = 0.0684 MGD
Phase II: 658 residences @ 400 GPD each = 0.2632 MGD

Calculations for gallons per day were based upon figures obtained from Chapter 15 of the State of Louisiana Sanitary Code, Department of Health and Hospitals, Office of Public Health.

Type of Flow Measurement which the facility is currently using: Continuous Recorder

V. RECEIVING WATERS:

The discharge is into an unnamed ditch located at the northwest corner of Highway 190 and Highway 1077; thence into East Bedico Creek; thence into Bedico Creek; thence into the Tangipahoa River in Subsegment 040702 of the Lake Pontchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies. The wastewater will flow approximately 14 miles before reaching the Tangipahoa River.

The designated uses and degree of support for Segment 040702 of the Lake Pontchartrain Basin are as indicated in the table below^{1/}:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Subsegment 040702 of the Lake Pontchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040702 of the Lake Pontchartrain Basin, is listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS) as habitat for the Gulf Sturgeon, which is listed as a threatened species. Since effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat, LDEQ has determined that the issuance of this LPDES permit is not likely to adversely affect the Gulf sturgeon or its aquatic habitats. As instructed by the FWS in a letter dated October 24, 2007, from Boggs (FWS) to Brown (LDEQ), this statement of basis has been sent to the FWS for review and consultation.

VII. HISTORIC SITES:

Although this facility is considered a new discharger, the discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no

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potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII.**PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Todd Franklin
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX.**PROPOSED PERMIT LIMITS:**

Subsegment 040702, Tangipahoa River-from I-12 to Lake Pontchartrain, is listed on LDEQ's Final 2006 303(d) List as impaired for ammonia, nutrients, dissolved oxygen, and mercury. To date no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL.

Ammonia, Nutrients, and Dissolved Oxygen

The listed impaired waterbody in Subsegment 040702 is the Tangipahoa River. This facility will discharge into an unnamed ditch; thence into East Bedico Creek; thence into Bedico Creek before the effluent would reach the Tangipahoa River. This is a distance of approximately 14 miles. Based on the size of the proposed discharge and the distance from the impaired waterbody, the discharge should not cause or contribute to ammonia, nutrients, and dissolved oxygen impairments currently found in the Tangipahoa River. Therefore, limitations will be placed into the permit in accordance with the Statewide Sanitary Effluent Limitations Policy for discharges of sanitary wastewater over 10,000 GPD in St. Tammany Parish.

Mercury

Traditional approaches to pollution control emphasize treating for pollutants through end-of-pipe effluent limitations. Mercury is introduced into domestic wastewater treatment facilities from users of the treatment system (ex: dental offices, labs, hospitals, doctor's offices, schools, inflow, infiltration and other users). Since the removal of mercury from sanitary wastewater is difficult, waste minimization and pretreatment is a more effective way to control discharges of mercury.

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Through mercury minimization, LDEQ anticipates that mercury pollution prevention and waste minimization rather than end-of-pipe controls will result in the most efficient reduction of mercury discharges to surface waters of Louisiana from domestic wastewater treatment facilities. Pollution prevention and waste minimization of mercury are more reasonably accomplished and cost productive than the implementation of controls and technologies to meet end-of-pipe mercury effluent limitations.

Mercury minimization employs effluent sampling and system wide monitoring programs to locate and identify potential sources of mercury into the treatment system. Once identified mercury minimization integrates cost-effective reduction controls, either treatment or prevention based, to reduce or eliminate mercury from the source. Therefore, the permittee will be required to develop and implement a Mercury Minimization Program Plan (MMPP).

Interim Effluent Limits:**Outfall 001 – Phase I**

Interim limits shall become effective on the effective date of the permit and expire when the expected flow of the facility exceeds 0.0684 MGD (171 homes).

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	6	10 mg/l	15 mg/l	Limits are set in accordance with the Areawide Policy for St. Tammany Parish.
TSS	9	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
NH ₃ -N	3	5 mg/l	10 mg/l	Limits are based on Best Professional Judgement. The Areawide Policy for St. Tammany Parish requires NH ₃ -N limitations for treatment facilities discharging greater than 100,000 GPD. Since the ultimate build-out of the treatment plant will be greater than 100,000 GPD, the Department shall require the NH ₃ -N limitations to be met during phase I.

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Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPI considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Final Effluent Limits:**OUTFALL 001 – Phase II**

Final limits shall become effective when the expected flow of the facility exceeds 0.0684 MGD and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	22	10 mg/l	15 mg/l	Limits are set in accordance with the Areawide Policy for St. Tammany Parish.
TSS	33	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

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Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
NH ₃ -N	11	5 mg/l	10 mg/l	Limits are set in accordance with the Arcawide Policy for St. Tammany Parish.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X.**PREVIOUS PERMITS:**

This is a proposed wastewater treatment plant; therefore, there are no previous water discharge permits.

XI.**ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

There have been no inspections performed for this facility.

B) Compliance and/or Administrative Orders

There have been no enforcement actions administered against this facility.

C) DMR Review

There has been no discharge from this treatment plant; therefore, no DMRs have been submitted.

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XII. ADDITIONAL INFORMATION:

Please be aware that the Department will be conducting a TMDL in the Lake Pontchartrain Basin scheduled for completion in 2011. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301 (b) (2) (c) and (d); 304 (b) (2); and 307 (a) (2) of the Clean Water Act, if the effluent standard or limitations are issued or approved:

- A. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- B. Controls any pollutant not limited in the permit; or
- C. Require reassessment due to change in 303(d) status of waterbody; or
- D. Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the expected flow of 0.2632 MGD.

Effluent loadings are calculated using the following example:

$$\text{CBOD}_5: 8.34 \text{ lb/gal} \times 0.2632 \text{ MGD} \times 10 \text{ mg/l} = 22 \text{ lb/day}$$

The Monitoring Requirements, Sample Types, and Frequency of Sampling shall be as follows:

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
CBOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

The permittee shall achieve compliance with the FINAL EFFLUENT LIMITATIONS and MONITORING REQUIREMENTS as specified in accordance with the following schedule:

ACTIVITY	DATE
Achieve Interim Effluent Limitations and Monitoring Requirements	On the effective date of the permit
Achieve Final Effluent Limitations and Monitoring Requirements	When the expected flow of the facility exceeds 0.0684 MGD

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The above listed activities must be achieved on or before the deadline date. Additionally, the permittee shall submit a progress report outlining the status of all facility improvements on a yearly basis until compliance is achieved.

Within 14 days of completion of the new facility or facility upgrade and/or expansion, the Permittee shall notify the Department of Environmental Quality-Office of Environmental Services in writing that construction has been completed.

The Permittee shall achieve sustained compliance with Final Effluent Limitations.

XIII**TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in this Statement of Basis.

XIV**REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Southeastern Louisiana Water & Sewer Company, LLC, Goodbee Regional Sewage Treatment Plant, September 12, 2007.

LPDES Permit Application to Discharge Wastewater, Southeastern Louisiana Water & Sewer Company, LLC, Goodbee Regional Sewage Treatment Plant, July 7, 2008.